

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: STREETWORKS

Report Number: P399674

Luminaire Tested: **ARCH-L-PA3-170-827-U-T3**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399674  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-10)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-PA3-170-827-U-T3  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 80 CRI, 2700K, 750mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 19201 lumens  
Efficiency: N/A  
Efficacy: 111.0 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B3 - U0 - G3

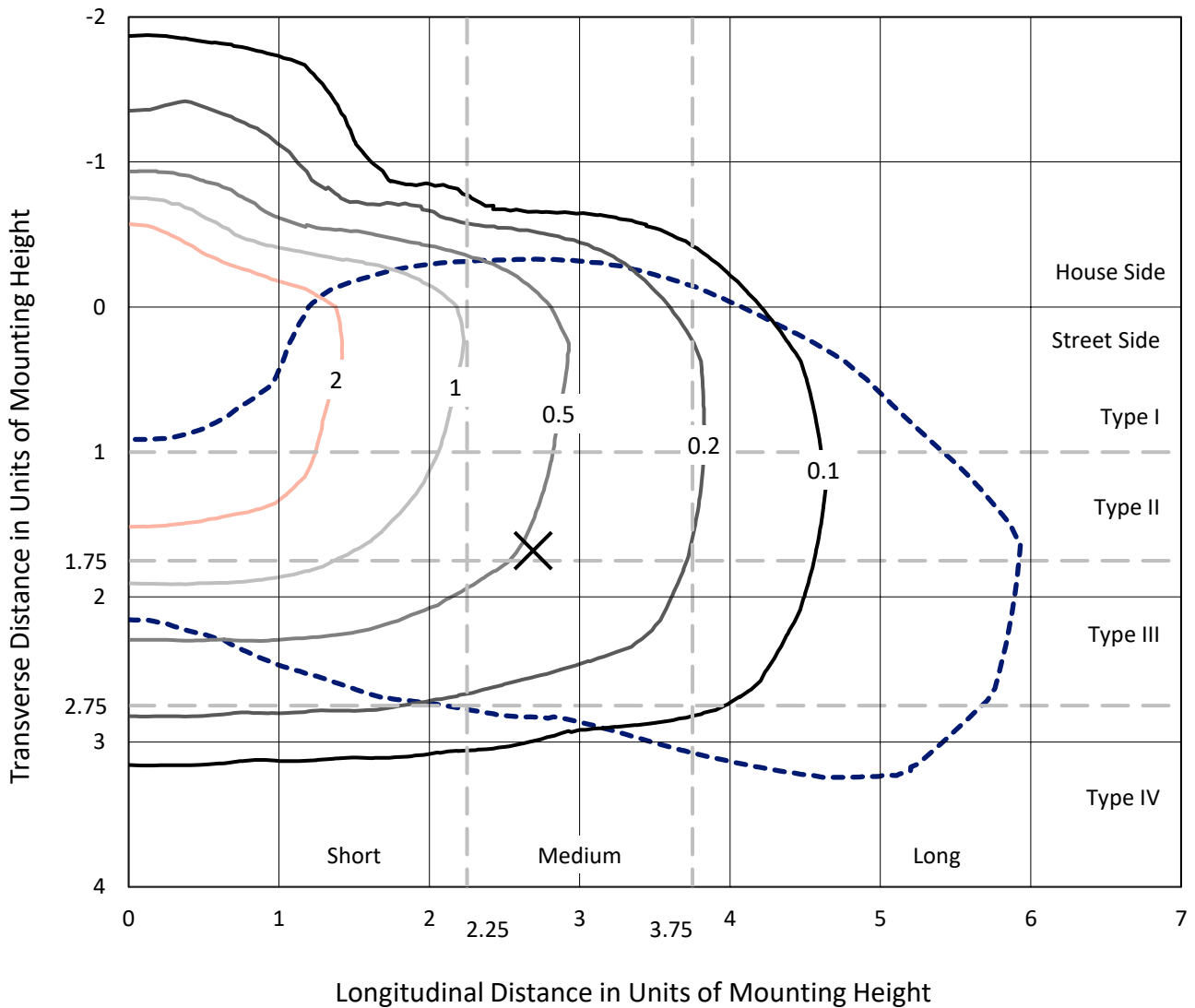
Input Watts (W): 173  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

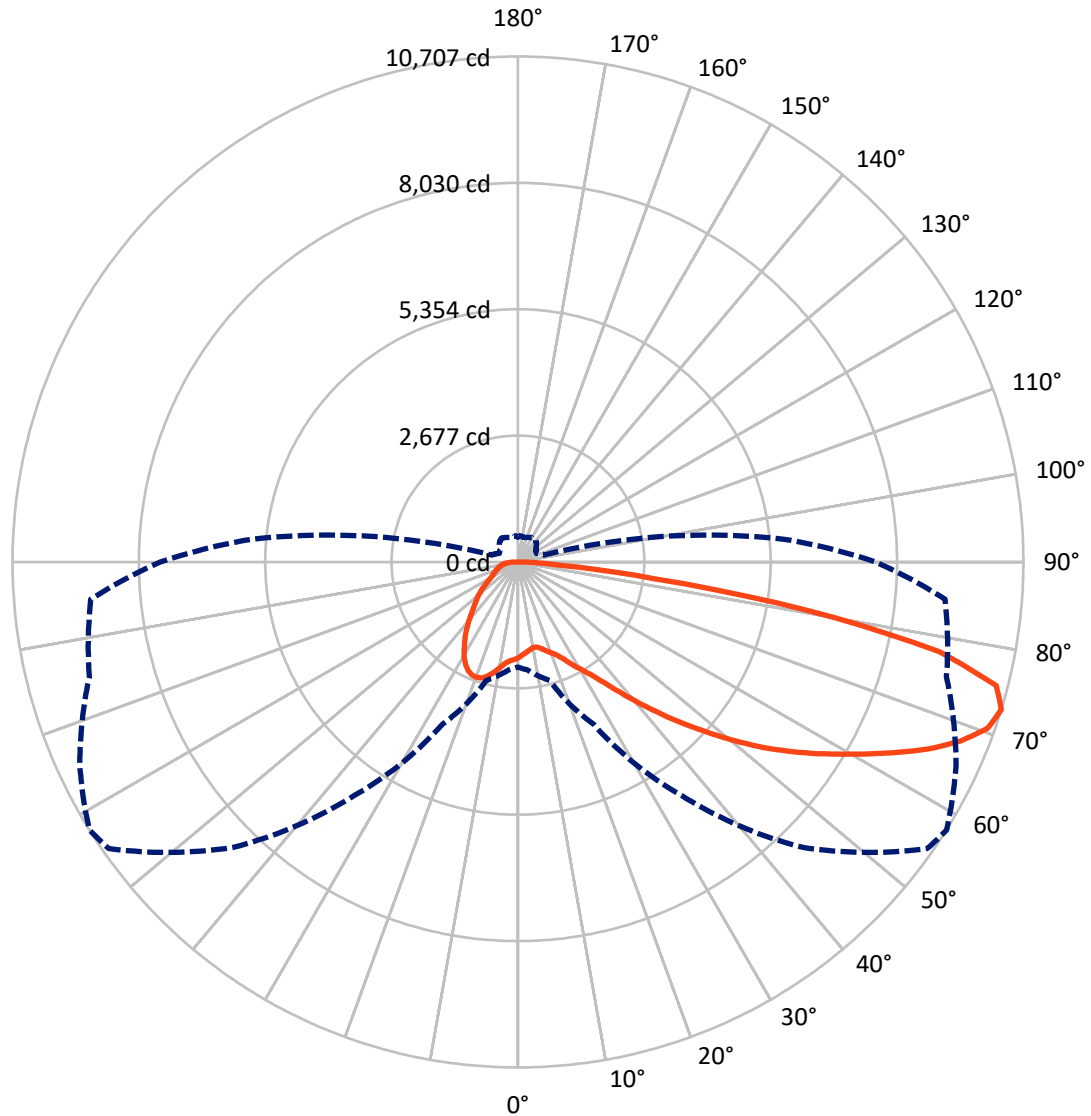
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.8 fc  
 Type IV - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral    - - - Horizontal Cone Through 72.5-Deg Vertical

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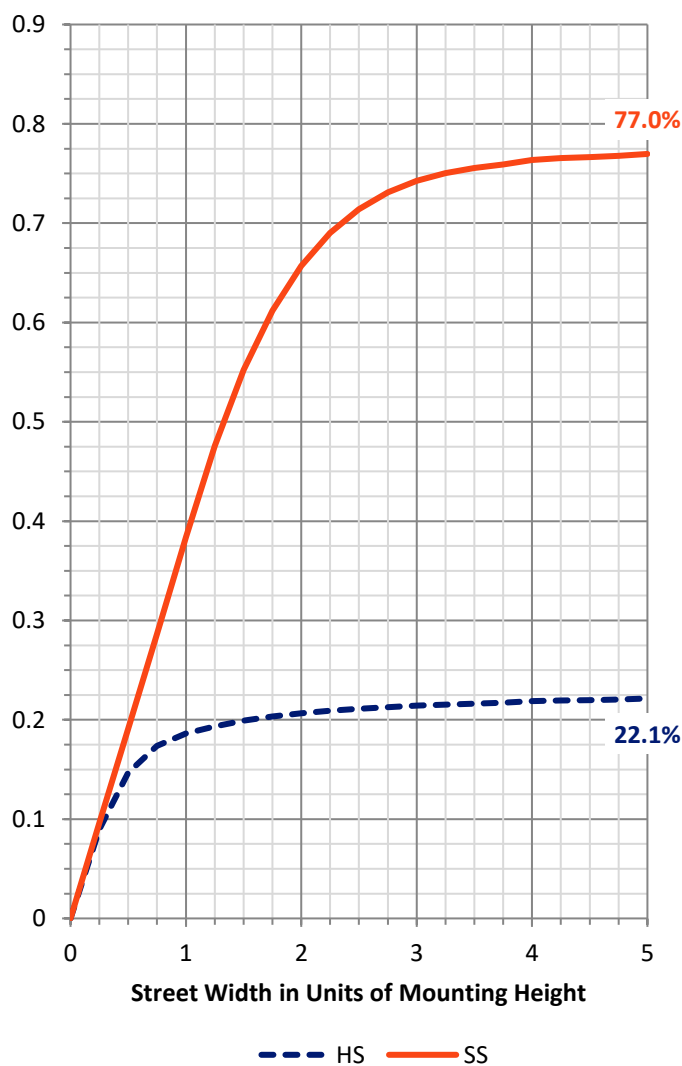
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4354.6	0.0	4354.6
	% Fixture	22.7	0.0	22.7
<b>Street Side</b>	Lumens	14846.4	0.0	14846.4
	% Fixture	77.3	0.0	77.3
<b>Total</b>	Lumens	19201.0	0.0	19201.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	195.1	1.0
10°-20°	619.6	3.2
20°-30°	1109.9	5.8
30°-40°	1669.6	8.7
40°-50°	2703.6	14.1
50°-60°	4069.9	21.2
60°-70°	4789.8	24.9
70°-80°	3396.4	17.7
80°-90°	647.2	3.4
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	19201.0	100.0
0°-180°	19201.0	100.0

**Coefficient of Utilization**



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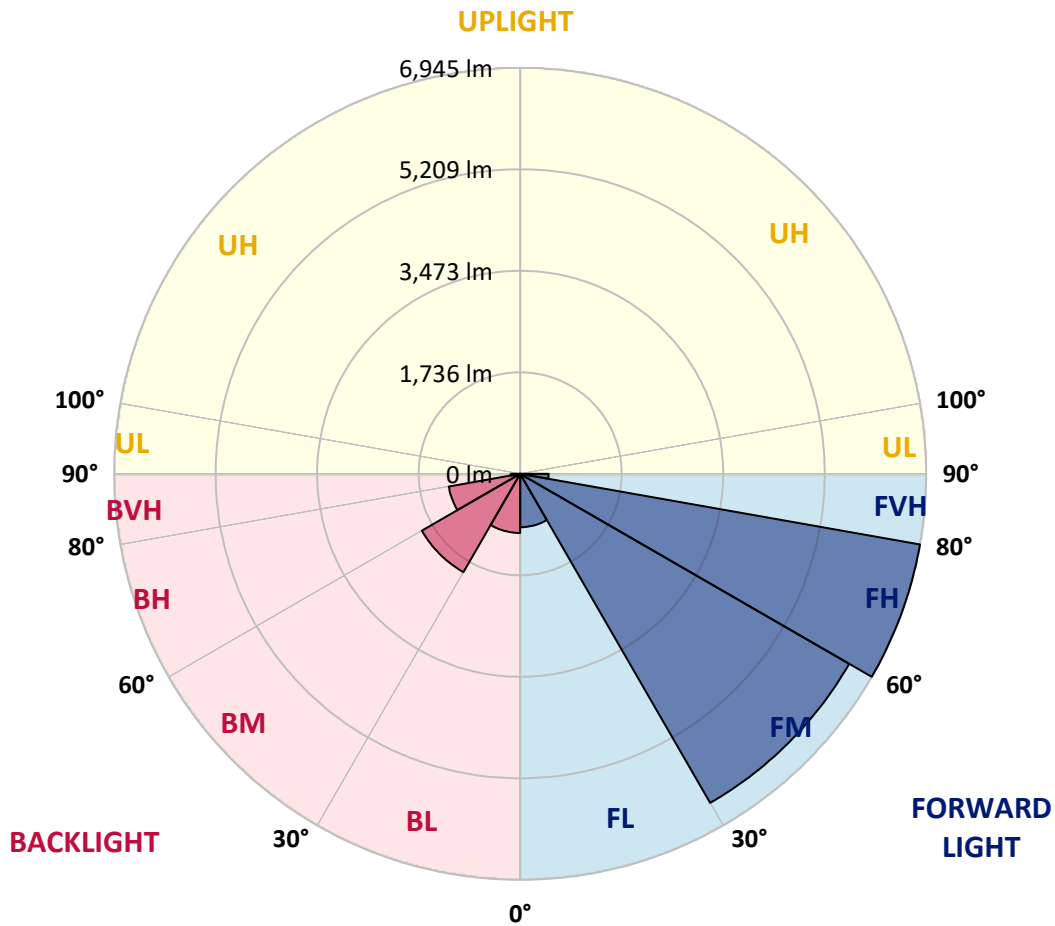
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	913.1	4.8			
FM (30°-60°)	6500.1	33.9			
FH (60°-80°)	6945.1	36.2			G3/7500
FVH (80°-90°)	488.2	2.5			G3/500
BL (0°-30°)	1011.5	5.3	B3/2500		
BM (30°-60°)	1943.0	10.1	B2/2500		
BH (60°-80°)	1241.1	6.5	B3/2500		G3/2500
BVH (80°-90°)	159.0	0.8			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G3**

Type IV Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	2025.3	2025.3	2025.3	2025.3	2025.3	2025.3	2025.3	2025.3	2025.3	2025.3	2025.3
2.5°	1949.3	1939.1	1941.6	1941.6	1951.8	1956.9	1959.4	1967.0	1972.1	1984.7	2002.5
5°	1858.0	1850.4	1852.9	1855.5	1873.2	1891.0	1906.2	1916.3	1931.5	1951.8	1977.1
7.5°	1792.1	1787.0	1789.6	1794.6	1809.8	1830.1	1855.5	1870.7	1893.5	1931.5	1974.6
10°	1743.9	1743.9	1746.5	1756.6	1771.8	1797.2	1817.4	1835.2	1880.8	1949.3	2015.2
12.5°	1705.9	1705.9	1713.5	1733.8	1759.1	1784.5	1832.7	1852.9	1913.8	2007.6	2086.1
15°	1703.4	1705.9	1708.4	1726.2	1754.1	1809.8	1880.8	1911.2	1984.7	2096.3	2187.5
17.5°	1743.9	1746.5	1736.3	1741.4	1774.4	1852.9	1946.7	1982.2	2076.0	2197.7	2291.5
20°	1868.1	1868.1	1837.7	1809.8	1832.7	1918.8	2025.3	2060.8	2164.7	2299.1	2392.8
22.5°	2121.6	2134.3	2063.3	2002.5	1967.0	2015.2	2111.5	2149.5	2266.1	2410.6	2504.4
25°	2428.3	2441.0	2344.7	2258.5	2192.6	2185.0	2248.4	2288.9	2385.2	2534.8	2613.4
27.5°	2724.9	2702.1	2613.4	2532.3	2448.6	2380.2	2428.3	2463.8	2575.3	2689.4	2737.6
30°	2958.1	2940.4	2854.2	2795.9	2717.3	2628.6	2600.7	2638.7	2730.0	2836.4	2861.8
32.5°	3216.6	3204.0	3117.8	3041.7	2975.8	2892.2	2831.4	2849.1	2899.8	2975.8	2991.1
35°	3546.2	3574.1	3482.8	3328.2	3254.7	3173.6	3130.5	3135.5	3173.6	3221.7	3196.4
37.5°	3893.4	3926.4	3931.5	3688.1	3589.3	3515.8	3470.1	3487.9	3533.5	3566.4	3487.9
40°	4537.3	4504.3	4372.5	4192.5	4040.5	3969.5	3906.1	3903.6	3936.5	3994.8	3852.9
42.5°	5391.5	5361.1	5094.9	4861.7	4620.9	4539.8	4415.6	4362.4	4377.6	4451.1	4253.4
45°	6210.2	6197.6	5984.6	5713.4	5424.5	5267.3	4983.4	4854.1	4841.4	4899.7	4664.0
47.5°	6937.7	6882.0	6727.3	6516.9	6486.5	6075.9	5553.7	5378.8	5318.0	5350.9	5087.3
50°	7715.9	7525.8	7312.9	7183.6	7404.1	7021.4	6129.1	5946.6	5797.1	5819.9	5546.1
52.5°	8129.1	7809.7	7670.3	7708.3	8004.9	7857.8	6755.2	6532.2	6291.3	6324.3	6002.4
55°	7774.2	7771.7	7832.5	8068.2	8481.4	8311.6	7350.9	7099.9	6836.3	6843.9	6527.1
57.5°	7287.5	7386.4	7700.7	8220.3	9072.0	8788.1	7936.4	7670.3	7429.5	7391.4	7122.8
60°	6843.9	6952.9	7409.2	8195.0	9277.3	9224.1	8494.1	8260.9	8065.7	7954.2	7748.9
62.5°	6169.7	6250.8	6897.2	8032.7	9105.0	9538.4	9059.3	8899.6	8752.6	8522.0	8423.1
65°	5376.3	5404.2	6086.0	7497.9	8889.5	9660.1	9622.1	9551.1	9409.1	9069.5	9089.8
67.5°	4517.0	4572.8	5171.0	6643.7	8418.0	9604.3	10058.0	10116.3	9949.1	9439.6	9515.6
70°	3601.9	3670.4	4124.1	5462.5	7617.0	9363.5	10461.1	10554.9	10232.9	9561.2	9594.2
72.5°	2228.1	2294.0	2598.2	3794.6	6037.9	8554.9	10585.3	10707.0	10240.6	9399.0	9082.2
75°	770.6	778.2	1016.5	1820.0	3584.2	6458.6	10179.7	10466.1	9918.6	8808.4	7903.5
77.5°	352.3	365.0	451.2	750.3	1589.3	3485.3	8405.4	9122.7	8940.2	7885.7	6083.5
80°	243.3	248.4	311.8	448.7	917.6	1226.8	5305.3	6240.7	6560.0	6106.3	3898.5
82.5°	182.5	187.6	240.8	304.2	661.6	595.7	2020.2	2899.8	3604.5	3538.6	1629.9
85°	174.9	172.4	187.6	202.8	441.1	354.9	654.0	897.3	1406.8	1204.0	410.6
87.5°	76.0	83.6	192.6	114.1	230.7	164.8	283.9	332.1	428.4	372.6	147.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2025.3	2025.3	2025.3	2025.3	2025.3	2025.3	2025.3	2025.3	2025.3	2025.3	2025.3
2.5°	2010.1	2015.2	2030.4	2053.2	2065.9	2091.2	2108.9	2119.1	2126.7	2129.2	2129.2
5°	1992.3	2002.5	2035.4	2073.5	2108.9	2162.2	2210.3	2238.2	2258.5	2266.1	2268.6
7.5°	1997.4	2022.8	2070.9	2126.7	2172.3	2240.8	2299.1	2354.8	2400.4	2418.2	2418.2
10°	2045.6	2081.1	2147.0	2220.5	2278.8	2349.8	2410.6	2458.7	2512.0	2542.4	2547.5
12.5°	2119.1	2162.2	2248.4	2329.5	2395.4	2451.1	2506.9	2542.4	2567.7	2590.6	2595.6
15°	2223.0	2276.2	2362.4	2446.1	2504.4	2539.9	2555.1	2555.1	2552.5	2555.1	2560.1
17.5°	2326.9	2377.6	2463.8	2547.5	2575.3	2555.1	2537.3	2532.3	2529.7	2524.7	2527.2
20°	2428.3	2476.5	2550.0	2613.4	2590.6	2519.6	2496.8	2494.2	2486.6	2481.6	2476.5
22.5°	2529.7	2565.2	2626.0	2648.9	2557.6	2456.2	2428.3	2413.1	2403.0	2390.3	2377.6
25°	2646.3	2656.5	2702.1	2666.6	2476.5	2339.6	2299.1	2276.2	2266.1	2253.4	2243.3
27.5°	2755.3	2755.3	2762.9	2638.7	2357.4	2185.0	2124.2	2083.6	2081.1	2078.5	2076.0
30°	2854.2	2841.5	2816.2	2555.1	2202.7	1994.9	1903.6	1863.1	1878.3	1891.0	1893.5
32.5°	2970.8	2945.4	2874.5	2441.0	2017.7	1782.0	1670.4	1652.7	1670.4	1685.6	1675.5
35°	3153.3	3107.7	2935.3	2309.2	1840.3	1586.8	1480.3	1455.0	1449.9	1447.4	1427.1
37.5°	3414.4	3335.8	2983.4	2167.2	1665.4	1414.4	1335.8	1282.6	1234.4	1183.7	1176.1
40°	3733.7	3599.4	3016.4	2005.0	1480.3	1269.9	1186.3	1117.8	1036.7	948.0	937.9
42.5°	4083.5	3883.3	3031.6	1825.0	1318.1	1150.8	1046.9	960.7	869.4	801.0	788.3
45°	4461.2	4190.0	3018.9	1652.7	1186.3	1049.4	932.8	839.0	765.5	717.3	707.2
47.5°	4828.8	4542.3	2983.4	1515.8	1084.9	963.2	844.1	757.9	702.1	648.9	636.2
50°	5300.2	4879.5	2940.4	1409.3	973.4	877.0	788.3	697.1	633.7	608.3	603.3
52.5°	5822.4	5216.6	2889.7	1275.0	864.4	808.6	752.8	671.7	651.4	603.3	595.7
55°	6387.7	5617.1	2879.5	1105.2	768.0	760.4	717.3	694.5	699.6	603.3	590.6
57.5°	6983.3	6045.5	2902.3	935.3	689.5	717.3	732.6	714.8	707.2	616.0	590.6
60°	7604.4	6458.6	2833.9	778.2	628.6	681.9	750.3	704.7	648.9	610.9	593.1
62.5°	8207.7	6805.9	2537.3	666.6	583.0	671.7	740.2	666.6	603.3	603.3	595.7
65°	8646.2	6960.5	1984.7	585.5	552.6	659.0	722.4	641.3	590.6	608.3	598.2
67.5°	8696.9	6800.8	1333.3	522.2	527.2	636.2	681.9	618.5	577.9	623.6	608.3
70°	8385.1	6385.1	816.2	474.0	494.3	595.7	646.4	595.7	560.2	610.9	588.1
72.5°	7576.5	5609.5	575.4	433.4	458.8	557.7	613.4	575.4	534.8	552.6	529.8
75°	6215.3	4347.2	456.3	395.4	423.3	522.2	585.5	545.0	504.4	496.8	481.6
77.5°	4402.9	2785.7	367.5	365.0	385.3	479.1	547.5	509.5	468.9	453.7	443.6
80°	2532.3	1366.3	316.8	329.5	349.8	436.0	501.9	468.9	430.9	408.1	392.9
82.5°	968.3	476.5	278.8	286.4	309.2	390.4	456.3	428.4	390.4	410.6	344.7
85°	314.3	261.1	228.1	235.7	258.5	324.5	403.0	380.2	337.1	299.1	276.3
87.5°	139.4	141.9	121.7	134.3	162.2	215.5	294.0	278.8	245.9	205.3	197.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)